

REMARKS

By this Amendment, Applicants amend the specification to correct informalities according to the Examiner's suggestions. Applicants amend claims 1, 3, 5-7, 9-12, 14-17, and 19, and cancel claims 2, 8, 13, and 18 without prejudice or disclaimer of the subject matter thereof. Applicants also add new claims 20-26. Upon entry of this Amendment, claims 1, 3-7, 9-12, 14-17, and 19-26 will be pending.

In the Office Action, the Examiner objected to the specification as having informalities. The Examiner also rejected claims 1-3, 5, 7-9, 12-14, and 16-19 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,751,405 to Hasegawa (hereinafter "Hasegawa"), rejected claims 4 and 10 under 35 U.S.C. § 103(a) as unpatentable over Hasegawa in view of U.S. Patent No. 6,192,078 to Komiya et al. (hereinafter "Komiya"), and rejected claims 6, 11, and 15 under 35 U.S.C. § 103(a) as unpatentable over Hasegawa in view of U.S. Patent No. 6,393,393 to Kawahara (hereinafter "Kawahara"). Applicants respectfully traverse the rejections under both 35 U.S.C. § 102 and 103.

Regarding Specification Objections

Applicants have amended the specification to correct informalities on pages 12, 14, 15, 18, 19, 20, 27, and 29 according to the Examiner's suggestions. Applicants respectfully request withdrawal of the objections to the specification.

Regarding the Rejections Under 35 U.S.C. § 102

Applicants respectfully traverse the Examiner's rejection of claims 1-3, 5, 7-9, 12-14, and 16-19 under 35 U.S.C. § 102(e) as anticipated by Hasegawa. In order to anticipate Applicants' claimed invention under 35 U.S.C. § 102, each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be

shown in as complete detail as is contained in the . . . claim.” See M.P.E.P. § 2131, quoting Richardson v. Suzuki Motor Co., 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Claims 1 and 17 as amended, recite combinations including, for example, “controlling the coding of a next frame following the frame based on the detected processing time so as to maintain a predetermined frame rate.” Hasegawa fails to disclose at least “controlling the coding of a next frame following the frame based on the detected processing time so as to maintain a predetermined frame rate,” as required by amended claims 1 and 17.

Hasegawa teaches a video recording apparatus having a compression control portion 10, and “[t]he compression control portion 10 includes a timer 2 measuring a compression processing period . . . , and a frame drop control portion 1 making judgment whether frame drop is to be effected fro next GOP.” Hasegawa, column 5, lines 15-28. “[I]f the process period is in excess and also the picture is in a condition where motion is a little, the excess of elapsed period can be recovered by performing the frame dropping process in GOP process and not performing the compression process for the frame.” Hasegawa, column 5, lines 47-51, emphasis added. Further, Hasegawa explains that “the dropped frame can be compensated by repeatedly displaying the frame [in the GOP] immediately preceding or following frame so that user of the apparatus may not perceive drop of the frame.” Hasegawa, column 5, lines 51-55. However, dropping frames in a group of picture (GOP) to reduce the amount of frame processing of a GOP does not constitute a teaching of “controlling the coding of a next frame following the frame based on the detected processing time so as to maintain

a predetermined frame rate,” as required by amended claims 1 and 17. (emphasis added).

Therefore, Hasegawa fails to disclose each and every element of Applicants’ invention recited in amended claims 1 and 17, either expressly or inherently. Thus, Hasegawa cannot anticipate claims 1 and 17 under 35 U.S.C. § 102(e). Applicants respectfully request withdrawal of the rejection of claims 1 and 17. Since claims 2, 3, and 5, and claims 18-19 depend on claims 1 and 17, respectively, Applicants also request withdrawal of the rejection of claims 2, 3, 5 and 18-19 for at least the same reasons stated above.

Further, independent claims 7, 12, and 16, while of different scope, recite similar language as claims 1 and 17. Independent claims 7, 12, and 16 are therefore allowable at least for reasons discussed above in regard to claims 1 and 17. Applicants respectfully request withdrawal of rejection of claims 7, 12, and 16. Also, Applicants respectfully request withdrawal of rejection of claims 8-9 and 13-14 since claims 8-9 and 13-14 directly or indirectly depend on claims 7 and 12, respectively.

Regarding the Rejections Under 35 U.S.C. § 103

Applicants respectfully traverse the Examiner’s rejection of claims 4 and 10 under 35 U.S.C. § 103(a) as unpatentable over Hasegawa in view of Komiya. In order to establish a prima facie case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim elements. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art, to modify a reference or to combine reference teachings. Third, there must be a reasonable expectation of success. See M.P.E.P. § 2143.

As explained above, Hasegawa fails to teach or suggest at least “controlling the coding of a next frame following the frame based on the detected processing time so as to maintain a predetermined frame rate,” as required by amended claim 1. Komiya fails to cure Hasegawa’s deficiencies.

Komiya teaches a motion picture converting apparatus “wherein when the label storing means in the first aspect outputs the label indicating that the motion of the macro [b]lock is small, the encoding section selects a small motion vector search area so that a motion vector detection may be performed.” Komiya, column 3, lines 57-64.

However, Komiya fails to teach or suggest at least “controlling the coding of a next frame following the frame based on the detected processing time so as to maintain a predetermined frame rate,” as required by amended claim 1.

Therefore, neither Hasegawa nor Komiya, taken alone or in any reasonable combination, teaches or suggests suggests all elements of Applicant’s invention as recited in claim 1. A prima facie case of obviousness cannot be established. Claim 1 is thus nonobvious over Hasegawa in view of Komiya under 35 U.S.C. § 103. Since claim 4 depends on claim 1, claim 4 is also nonobvious over Hasegawa in view of Komiya under 35 U.S.C. § 103. Applicants respectfully request withdrawal of the rejection of claim 4.

Under similar reasoning corresponding to claim 4, Applicants further submit that independent claim 7 and its dependent claim 10 are also nonobvious over Hasegawa in

view of Komiya under 35 U.S.C. § 103. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 10.

Applicants also respectfully traverse the Examiner's rejection of claims 6, 11, and 15 under 35 U.S.C. § 103(a) as unpatentable over Hasegawa in view of Kawahara. Claims 6 and 11, as amended, call for combinations including, for example, "controlling the coding of a next frame following the frame based on the detected load of the CPU so as to maintain a predetermined frame rate." Hasegawa, as well as Komiya, fails to teach or suggest at least "controlling the coding of a next frame following the frame based on the detected load of the CPU so as to maintain a predetermined frame rate," as required by amended claims 6 and 11.

Since Hasegawa requires that "the dropped frame can be compensated by repeatedly displaying the frame [in the GOP] immediately preceding or following frame so that user of the apparatus may not perceive drop of the frame," Hasegawa, column 5, lines 51-55, Hasegawa's teaching of dropping frames in a group of picture (GOP) to reduce the amount of frame processing of a GOP does not constitute a teaching of "controlling the coding of a next frame following the frame based on the detected load of the CPU so as to maintain a predetermined frame rate," as required by amended claims 6 and 11. (emphasis added).

Kawahara fails to cure Hasegawa's deficiencies. "Kawahara teaches that knowing the load of the CPU allows for optimal grouping for encoding (Kawahara: figure 7b, column 11, lines 28-55)." (Office Action, at 5). However, Kawahara fails to teach or suggest at least "controlling the coding of a next frame following the frame based on the

detected load of the CPU so as to maintain a predetermined frame rate," as required by amended claims 6 and 11. (emphasis added).

Therefore, neither Hasegawa nor Kawahara, taken alone or in any reasonable combination, teaches or suggests all elements of Applicants' invention recited in amended claims 6 and 11. A prima facie case of obviousness cannot be established. Claims 6 and 11 are therefore nonobvious over Hasegawa in view of Kawahara under 35 U.S.C. § 103. Applicants respectfully request withdrawal of the rejection of claims 6 and 11.

Further, claim 15, while of different scope, recites similar language as claims 6 and 11, claim 15 is therefore allowable at least for reasons discussed above as regard to claims 6 and 11. Accordingly, Applicants also respectfully request withdrawal of the rejection of claims 6 and 11.

Conclusion


In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: September 29, 2004

By: 
Wenye Tan
Reg. No. 55,662